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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/721,556	11/22/2000	Stephen G. Perlman	004259-P009	5172
32641	7590	01/24/2006	EXAMINER	
DIGEO, INC C/O STOEL RIVES LLP 201 SOUTH MAIN STREET, SUITE 1100 ONE UTAH CENTER SALT LAKE CITY, UT 84111			BOCCIO, VINCENT F	
			ART UNIT	PAPER NUMBER
			2616	

DATE MAILED: 01/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/721,556

Applicant(s)

PERLMAN ET AL.

Examiner

Vincent F. Boccio

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on Election without traverse on 9/21/05.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-53 is/are pending in the application.
- 4a) Of the above claim(s) 19-53 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date (516)02(11)14(02)4(7(03)9/13/04)
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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**DETAILED ACTION**

The Group and/or Art Unit location of your application in the PTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Group Art Unit 2616.

**Election/Restrictions**

1. Applicant's election without traverse of claims 1-18, Fig. 3, in the reply filed on 9/21/05 is acknowledged.

**Claim Rejections - 35 USC § 102**

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

2. Claims 1-2, 4-7, 10-11, 13-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Wachtfogel et al. (WO 00/01149).

Regarding claims 1, 4-7, Wachtfogel discloses and meets the limitations associated with a multimedia apparatus comprising:

- a mass storage device (Fig. 1 B, with storage elements of at least, "high capacity storage 55, also 65");
- to store uncompressed in an interim buffer (page 19, lines 1-, memory 55 as a circular buffer, when a user freezes the program and triggers, storage and recording) and even adapted to compressed the multimedia content (see bidirectional compression, decompression element 105 and page 15, lines 17-21, "The apparatus 10 ... includes a compressor/decompressor 105 which is operative to compress/decompress data provided to/retrieved from any one of the memories 55 or 56 ... 105 ... operatively ... with the data bus");

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- compression (page 26, "(6) compression preferences for compressing the program prior to storage"), as a background task or multitasking system, compression and another operation at the same time (page 16, lines 20-26, "record several program simultaneously while viewing any [program displayed at any channel") and storing the compressed content to a long term buffer (55/65) on the mass storage device, also see page 19, "user freezes the program ... the program is recorded ... memory 55 ... resume playing ... uses a portion of the memory 55 as a circular buffer",
- further wherein the compression ratio (page 23, "a quality of recording of the program", page 24, lines 12-18, "... quality ... in accordance with free ... capacity ... parameter defining quality of recording", page 26, "compression preferences", etc.....), can be controlled, wherein data can be routed to and from any memory 55/65 to and from the 105, as desired, claim 7;
- wherein the multimedia content is broadcast video content (page 14, Fig. 1 A), from a cable provider (page 13, cable head end) or Web-cast (page 4, lines 11-12, "... such as the internet", page 12, lines 9, "The terms "program" and "television programs" are interchangeably used throughout .....") and page 20, lines 25-, "A type of the program such as a movie, show, a commercial and a program provided from the WWW", therefore, a program from the WWW/internet can be a web-cast type TV program), over a network, claims 4-6.

Regarding claim 2, **Wachtfogel** further meets the limitation of stream the compressed (page 20, lines 14-18) from the buffer to decompress (decompressor 105) with a decompression module and then render to a display responsive to a user request (page 12, rendered to display 13, wherein Fig. 1 A is a simplified pictorial ... of ... apparatus 10").

Claims 10-11, 13-16 are analyzed and discussed with respect to the claims above, but, recite an additional limitation of such as, a computer implemented methods for ... a multi-media storage device is deemed met by Fig. 1 B, in view of the Bus 60 and processor 45, connected to the bus, rendering the limitation of a computer implemented as met.

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Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 8-9 and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wachtfogel et al. (WO 00/01149).

Regarding claims 8-9 and 17-18, Wachtfogel fails to disclose ADPCM (audio compression) adaptive differential pulse code modulation and digital video DV25 compression.

The examiner takes official notice that ADPCM and DV25 are well known and obvious standards which are deemed well known and therefore, it would have been obvious to one skilled in the art at the time of the invention to utilize established standards such as DV25 and ADPCM, as is obvious to those skilled in the art to utilize and conform with well known standards.

5. Claims 3 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wachtfogel et al. (WO 00/01149) in view of O'Conner (US 6,480,667).

Regarding claims 3 and 12, Wachtfogel discloses compression of data prior to recording, also disclose at page 19, wherein the

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user can freeze the program with key 121, thereafter the program is recorded in compressed form, from that point, wherein upon resumption can retrieve from memory 55 as a circular buffer and decode the compressed and render to the display, also the user can catch up with the broadcast,

but, fails to disclose automatic streaming the uncompressed content remaining in the interim buffer directly to the rendering device one the compressed content in the long term buffer has been streamed to the rendering device, if any uncompressed content remains in the interim buffer when the long term storage buffer is empty.

O'Conner teaches in apparatus Fig. 1 & the method Fig. 6, upon a simultaneous recording and reproduction operation, wherein compressed content is retrieved from storage, but, when the time delay is less than a threshold (step 604), the signal (analog in and A/D processed therefore, digital, but, is uncompressed) from the video in 102 (col. 2, "video in 102 performs A to D") is routed to video out 120 automatically and rendered, upon a time delay less than the threshold, as taught by O'Conner.

Even with O'Conner, the combination fails to disclose a buffering, the uncompressed content or the stream of uncompressed content, remaining in the interim buffer directly to the rendering device.

The examiner takes official notice that it is deemed well known upon switching between signals, to buffering the switched to signal to allow for seamless switching or flicker free switching between content sources, as is well known.

Therefore, it would have been obvious to those skilled in the art to modify Wachtfogel by automatically switching between reproduction and decompression to the real time signal from the tuner (analog/digital, but, uncompressed), as taught by O'Conner, upon a time delay less than a threshold, and to buffer the signal to switch to, which would allow for a seamless or flicker free switching between, as is obvious to those skilled in the art.

**Contact Fax Information**

Any response to this action should be faxed to:


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(571) 273-8300, for communication as intended for entry,  
this Central Fax Number as of 7/15/05

**Contact Information**

Any inquiry concerning this communication or earlier  
communications should be directed to the examiner of  
record, Monday-Tuesday & Thursday-Friday, 8:00 AM to 5:00  
PM Vincent F. Boccio (571) 272-7373.

Primary Examiner, Boccio, Vincent  
12/12/05

  
VINCENT BOCCIO  
PRIMARY EXAMINER